COMP354 – Operating Systems
Spring 2012

Project #5 – Grading Rubric
Processes and Multiprogramming

__/ 30 Required Functionality

compileOS script additions work correctly
Y N compiles and links proc.c with kernel
Y N compileOS produces bootable OS image.

proc.h/proc.c functionality works correctly
Y N proc structures correctly initialized
Y N correctly finds free memory segment
Y N correctly releases memory segments
Y N correctly finds free PCB
Y N correctly releases PCB
Y N correctly adds PCBs to ready queue
Y N correctly removes PCBs from ready queue
Y N proc.c is sufficiently tested in testproc.c

Multiprogramming functionality works correctly
Y N Basic shell commands continue to work (type, copy, dir)
Y N Shell launches correctly after OS boot
Y N Basic user program executes (uprog2)
Y N Shell operates concurrently with executing program
Y N Multiple programs run concurrently with shell

__/ 30 Improvements

Yield
Y N yield functionality is accessible via user library.
Y N yield functionality is correct.

ShowProcesses
Y N ShowProcesses is accessible via user library.
Y N shell recognizes and executes the ps command.
Y N ShowProcesses functionality is correct.

Kill
Y N kill is accessible via user library.
Y N shell recognizes and executes the kill <seg> command.
Y N kill functionality is correct.

__/ 10 Coding Style
Y N Uses struct’s appropriately for searching Disk Directory.
Y N Uses reasonable functional decomposition.
e.g. String comparisons
   e.g. Finding directory entries

__/ 5 Documentation
Y N All source files are well formatted and adequately
documented.

__/ 0 Bonus

Sleep System Call
Y N Sleep system call is implemented in kernel
Y N Sleep system call is implemented in user library
Y N Calling sleep causes program to sleep for correct amount of time.

Modified execute Command in Shell
Y N execute <prog> causes shell to wait.
Y N execute <prog> runs shell concurrently

Priority Scheduling
Y N priority scheduling works correctly

__/ 75 Total